AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph on page 2, line 30 through page 3, line 4 as follows:

In general, the entry node does not comprise means for the reception and/or reading of source signals (originating from outside the network). It receives audiovisual signals coming from the entry terminal and introduces them into the home audiovisual network. The term "entry terminal" is understood to mean, for example, a digital camera, a digital camcorder, a digital output DVD player or any analog device seen through an analog/digital converter.

Please amend the paragraph on page 4, lines 18 through 27 as follows:

The control of access to the signals transmitted within a heterogeneous network is an essential question. Indeed, in a home audiovisual network, for example, there are novel technologies which now enable access to numerous multimedia contents (audio and/or video and/or text contents). Through numerous stream connections within the network, all these multimedia contents can very easily be shared within a home. Each family member can thus access data from any room in the house in which there is a node of the network. It can easily be seen, however, that certain persons should be prevented from accessing programs unsuited to them. For example, children have to be barred from seeing

films depicting violence. A control system (hereinafter also called a "parental control system") is therefore necessary.

Please amend the paragraph on page 4, line 30 through page 5, line 8 as follows:

In the prior art, there is a parental control technique known from the U.S. ~~patent~~ Patent No. 6,009,433 in which:

- on the source equipment side, parental control information is inserted directly into the MPEG2 data packets;
- the MPEG2 data packets are transmitted through the transmission network; and
- on the destination equipment side, the parental control information is read and processed in order to decide on the processing to be applied to the payload data (typically, whether or not to restitute a video stream on a television set).

Please amend the paragraph on page 5, lines 11 through 14 as follows:

Indeed, if the above-mentioned known technique were to be transposed into the present context of a heterogeneous network, the parental control information would be inserted into the first packets (for example, IEEE 1394 type packets). Now, a modification of high-level data of this kind would be complex and costly to achieve.

Please amend the paragraph on page 5, lines 18 through 22 as follows:

Furthermore, this known technique does not provide for optimal management of a multicasting situation in which one and the same stream is given to several destination terminals (for example, to television sets located in different rooms). Indeed, this technique gives no information on the way to synchronize several destination terminals successively on one and the same data stream.

Please amend the paragraph on page 6, lines 8 through 30 as follows:

It is also a goal of the invention to provide a method of this kind that optimizes resources, and especially does not require the use of filler data (entailing no bandwidth losses).

These different goals, as well as others that will appear here below, are achieved according to the invention by means of a method for the insertion of information for the control of the broadcasting of a data stream in a heterogeneous network, the heterogeneous network including at least one entry sub-network conveying first packets and a basic network conveying second packets, the entry sub-network being connected to the basic network by means of an entry node forming the second packets from at least one sub-part of at least one first packet,

wherein the entry node:

- receives first packets from the entry sub-network
- associates an access level with each first packet from a plurality of access

levels, as a function of a predetermined policy of association;

- forms each second packet by enclosing at least a first packet or part of a first packet into said second packet, the first packets or part of the first packets enclosed within the second packet being associated with a same access ~~level ;~~ level;
- for each second packet, inserts into a field of the second packet representing the broadcast control information, the same access level associated with the at least first packet or part of a first packet enclosed within the second ~~packet ;~~ packet; and

transmits the second packets formed into the basic network.

Please amend the paragraph on page 7, lines 4 through 12 as follows:

As shall be explained in detail here below, this access level enables the destination node to decide:

- either to process the second packets normally. In this case the destination node may form (de-encapsulate) and sent first packets on the destination sub-network to any destination terminal that is connected to it. In one alternative embodiment, if the destination node integrates the destination terminal, it may directly process the first packets formed;
- or not process the second packet, and, for example, swallow it.

Please amend the paragraph on page 7, lines 21 through 31 as follows:

In a preferred embodiment of the invention, at each change in access level, between a first packet associated with a previous access level and another first packet associated with a new access level, the entry node:

- forms a synchronization second packet such that the start of the payload information of the synchronization second packet corresponds to the start of the payload information of the first packet associated with the new access level; and
- inserts a synchronization marker in the synchronization second packet.

Thus, the destination node is synchronized with the data stream that is transmitted from the entry terminal, the first packets of this stream being associated with the next access level.

Please amend the paragraph on page 11, lines 3 through 8 as follows:

The term “control information" is understood to mean especially, but not exclusively, a particular signal added by a broadcaster to the payload data. Typically, this particular signal represents a logo intended to be displayed in a particular region of the screen (for example, at the bottom right-hand position), to indicate a classification (for example, "restricted to persons 12 years of age and above") of an audiovisual stream (film, television broadcast, ~~etc;~~ etc.).

Please amend the paragraph on page 17, lines 7 through 9 as follows:

This home audiovisual network is a heterogeneous network of IEEE 1394 type digital buses, whose basic network 1 is a switched network comprising links connected to each other by links (for example, IEEE 1355 type or SWX-UTP5 type links).

Please amend the paragraph on page 17, line 19 through page 18, line 8 as follows:

In the example of Figure 1, the home audiovisual network comprises:

- a source node (Tuner Unit) 2 including a satellite television receiver whose antenna is referenced 3. This source node 2 is connected to the nodes referenced 4 and 5, through IEEE 1355 type links. Solely with a view to simplification, no analog terminal is shown connected to its analog interface and no IEEE 1394 type bus is shown connected to its corresponding interface;
- a node referenced 4 connected to the nodes referenced 2 and 6, through IEEE 1355 type links. An analog television set 7 is connected to its analog interface. Solely with a view to simplification, no IEEE 1394 type bus is shown connected to its corresponding interface;
- a node referenced 5 connected to the node referenced 2, through an IEEE 1355 type link. An IEEE ~~1994~~ 1394 type bus is connected to its corresponding interface and an analog television set 8 is connected to this

bus through an adapter 9. Solely with a view to simplification, no analog terminal is shown connected to its analog interface.

- a node referenced 6 connected to a node referenced 4, through an IEEE 1355 type link. An IEEE ~~1994~~ 1394 type bus is connected to its corresponding interface and a digital television set 10 is connected to this bus. Solely with a view to simplification, no analog terminal is shown connected to its analog interface.

Please amend the paragraph on page 19, lines 10 through 17 as follows:

The switch (or switch unit) 220 is used to transfer data from a first port to a second port of the interface of the switched network, receive data from an interface port of the switched network to the DPRAM 230 and transmit data from the DPRAM 230 to at least one port of the interface of the switched network (in this descending order of priority). The working of a switch 220 of this kind is described especially in the French ~~patent~~ Patent No. 2 820 921 published on ~~16th~~ August 16, 2002 and filed by the present applicant. Since such an operation is not part of the object of the present invention, it shall not be described in greater detail in this document.

Please amend the paragraph on page 21, lines 11 through 19 as follows:

In sending mode, (i.e., in the source node 2, in the above-mentioned example) the isochronous data (first packets) coming from the 1394 bus interface are analyzed by the

contents analysis module 302 and stored in the DPRAM 230. This DPRAM is managed by the DPRAM controller 303, which manages the read and write pointers. The pieces of data are then segmented by the SAR module 240 in order to meet constraints and comply with the data format of the switched network 1. After segmentation, they are transmitted to the switch unit 220, which sends them on the network 1. The first packets (1394) containing the isochronous data are encapsulated in second packets (1355), as described here below with reference to figure 8.

Please amend the paragraph on page 24, lines 4 through 10 as follows:

If the result of the test 514 is "false", the iteration variable I is incremented in the state referenced 520, and the operation passes to the state referenced 521 in which another test is performed to find out if the end of the table of time slots 502 has been reached. If this is the case (i.e., if the result of the test 521 is "false"), the operation passes to the step referenced 513, in which the next clock pulse is awaited. If the result of the test 521 is "true", the test referenced 511 is performed with the iteration variable I incremented.

Please amend the paragraph on page 29, lines 1 through 12 as follows:

According to the invention, the header 411 furthermore comprises the following fields (filled during the ~~« packet header writing"~~ "packet header writing" state referenced 809 in figure 6) :

- a synchronization field 415, encoded for example on one bit and named

"sy". It is in this field that the SAR module inserts a synchronization marker, if the "synchro insertion" flag has been positioned beforehand;

- an access level change 416, encoded for example on a bit and named "LC" ("level change"). It is in this field that the SAR module inserts an access level change marker if the "change of access level in the header" has been positioned beforehand;
- an access level field 417 in which the SAR module inserts the access level stored beforehand.

Please amend the paragraph on page 29, lines 13 through 18 as follows:

At reception (i.e. in each of the destination nodes referenced 4, 5 and 6 in the above-mentioned example), the data stream coming from the switched network 1, conveyed in the form of second packets, is received and analyzed by the switch unit 220. Depending on the access level extracted from this data stream by the switch unit 220, the data are either abandoned ~~(« swallowed")~~ ("swallowed") or stored in the DPRAM 230 before being processed by the destination node itself or else transferred to its local 1394 bus.

Please amend the paragraph on page 30, lines 11 through 20 as follows:

If the second packet is intended for this destination node, there is a passage to the state referenced 905 in which the SAR module reads the header of the second packet and

decides whether the second packet must be swallowed or stored in the DPRAM. If the destination node has already received a second packet whose header comprises a synchronization marker, from the time when the data stream considered is open, then the SAR module goes into the state referenced 906. If not, the SAR module ascertains that a synchronization marker is present in the header of the second packet. If the answer is positive (i.e., a marker is present), it goes into the state referenced 906. If the answer is negative (with no marker), it goes into the state referenced 913 already discussed here above.

Please amend the paragraph on page 31, lines 11 through 17 as follows:

The register is an n-bit register, n being the number of possible access levels managed by the system. Each bit is a Boolean flag, which is set at "1" if the access level corresponding to its bit number is an accepted level, and which is set at " 0" if not. In the example shown, only the access levels 0, 2 and 3 are accepted by the destination node concerned. As indicated here above, this register can be pre-filled or filled by the main user (i.e., by one of the parents in the case of a parental control type of application) by all appropriate means (keyboard, screen, etc.)